

AMENDMENT

Amendments to the Claims:

The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

1-9. (Cancelled)

10. (Currently amended) A polynucleotide sequence encoding ~~the multiple epitope fusion polypeptide sequence of claim 69~~ an immunogenic multiple epitope fusion polypeptide comprising more than one *Streptococcus* GapC epitope from more than one *Streptococcus* species, or the complement thereof.

11. (Currently amended) A ~~The polynucleotide sequence encoding the multiple epitope fusion polypeptide sequence of claim 2 or the complement thereof~~ of claim 10, wherein the multiple epitope fusion polypeptide further comprises a signal sequence.

12. (Currently amended) A ~~The polynucleotide sequence encoding the multiple epitope fusion polypeptide sequence of claim 3 or the complement thereof~~ of claim 10, wherein the multiple epitope fusion polypeptide further comprises a transmembrane sequence.

13. (Currently amended) A ~~The polynucleotide sequence encoding the multiple epitope fusion polypeptide sequence of claim 71 or the complement thereof~~ of claim 10, wherein the multiple epitope fusion polypeptide comprises GapC epitopes from *Streptococcus dysgalactiae*, *Streptococcus agalactiae* and *Streptococcus parauberis*.

14. (Currently amended) A ~~The polynucleotide sequence encoding the multiple epitope fusion polypeptide sequence of claim 72 or the complement thereof~~ of claim 13, wherein said more than one GapC epitopes are separated by a spacer amino acid sequence.

15. (Currently amended) A ~~The polynucleotide sequence encoding the multiple epitope fusion polypeptide sequence of claim 73 or the complement thereof~~ of claim 10, wherein said immunogenic polypeptide comprises an epitope from a Streptococcus GapC protein corresponding to

(a) the amino acid sequences shown at amino acid positions 62 to 81, inclusive, of SEQ ID NOS: 12, 14, 16, 18 and 20;

(b) the amino acid sequences shown at about amino acid positions 102 to 112, inclusive, of SEQ ID NOS: 12, 14, 16, 18 and 20;

(c) the amino acid sequences shown at about amino acid positions 165 to 172, inclusive, of SEQ ID NOS: 12, 14, 16, 18 and 20;

(d) the amino acid sequences shown at about amino acid positions 248 to 271, inclusive, of SEQ ID NOS: 12, 14, 16, 18 and 20; and

(e) the amino acid sequences shown at about amino acid positions 286 to 305, inclusive, of SEQ ID NOS: 12, 14, 16, 18 and 20.

16. (Currently amended) A ~~The polynucleotide sequence encoding the multiple epitope fusion polypeptide sequence of claim 74 or the complement thereof~~ of claim 15, wherein the multiple epitope fusion polypeptide comprises an amino acid sequence having at least 80% sequence identity to the contiguous sequence of amino acids depicted at positions 27-448 of the amino acid sequence depicted in SEQ ID NO:22.

17. (Currently amended) A ~~The polynucleotide sequence encoding the multiple epitope fusion polypeptide sequence of claim 75 or the complement thereof~~ of claim 16, further comprising a signal sequence.

18. (Currently amended) A The polynucleotide sequence encoding the multiple epitope fusion polypeptide sequence of claim 9 or the complement thereof of claim 17, wherein the signal sequence comprises the amino acid sequence depicted at positions 1-26 of SEQ ID NO:22.

19. (Original) A recombinant vector comprising:

(a) the isolated polynucleotide of claim 10; and

(b) at least one control element operably linked to said isolated polynucleotide,

whereby said coding sequence can be transcribed and translated in a host cell.

20. (Original) A recombinant vector comprising:

(a) the isolated polynucleotide of claim 11; and

(b) at least one control element operably linked to said isolated polynucleotide,

whereby said coding sequence can be transcribed and translated in a host cell.

21. (Original) A recombinant vector comprising:

(a) the isolated polynucleotide of claim 12; and

(b) at least one control element operably linked to said isolated polynucleotide,

whereby said coding sequence can be transcribed and translated in a host cell.

22. (Original) A recombinant vector comprising:

(a) the isolated polynucleotide of claim 13; and

(b) at least one control element operably linked to said isolated polynucleotide,

whereby said coding sequence can be transcribed and translated in a host cell.

23. (Original) A recombinant vector comprising:

(a) the isolated polynucleotide of claim 14; and

(b) at least one control element operably linked to said isolated polynucleotide,

whereby said coding sequence can be transcribed and translated in a host cell.

24. (Original) A recombinant vector comprising:

(a) the isolated polynucleotide of claim 15; and

(b) at least one control element operably linked to said isolated polynucleotide,

whereby said coding sequence can be transcribed and translated in a host cell.

25. (Original) A recombinant vector comprising:

(a) the isolated polynucleotide of claim 16; and

(b) at least one control element operably linked to said isolated polynucleotide,

whereby said coding sequence can be transcribed and translated in a host cell.

26. (Original) A recombinant vector comprising:

(a) the isolated polynucleotide of claim 17; and

(b) at least one control element operably linked to said isolated polynucleotide, whereby said coding sequence can be transcribed and translated in a host cell.

27. (Original) A recombinant vector comprising:

the isolated polynucleotide of claim 18; and

(b) at least one control element operably linked to said isolated polynucleotide,

whereby said coding sequence can be transcribed and translated in a host cell.

28. (Original) A host cell comprising the recombinant vector of claim 19.

29. (Original) A host cell comprising the recombinant vector of claim 20.

30. (Original) A host cell comprising the recombinant vector of claim 21.

31. (Original) A host cell comprising the recombinant vector of claim 22.
32. (Original) A host cell comprising the recombinant vector of claim 23.
33. (Original) A host cell comprising the recombinant vector of claim 24.
34. (Original) A host cell comprising the recombinant vector of claim 25.
35. (Original) A host cell comprising the recombinant vector of claim 26.
36. (Original) A host cell comprising the recombinant vector of claim 27.
37. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 28 under conditions for producing said polypeptide.
38. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 29 under conditions for producing said polypeptide.
39. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 30 under conditions for producing said polypeptide.
40. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 31 under conditions for producing said polypeptide.

41. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 32 under conditions for producing said polypeptide.

42. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 33 under conditions for producing said polypeptide.

43. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 34 under conditions for producing said polypeptide.

44. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 35 under conditions for producing said polypeptide.

45. (Withdrawn) A method for producing a multiple epitope fusion polypeptide, said method comprising culturing the cells of claim 36 under conditions for producing said polypeptide.

46-59. (Cancelled)

60. (Withdrawn) A method of treating or preventing a bacterial infection in a vertebrate subject comprising administering to said subject a therapeutically effective amount of a polynucleotide according to claim 10.

61. (Withdrawn) The method of claim 60, wherein said bacterial infection is a streptococcal infection.

62. (Withdrawn) The method of claim 60, wherein said bacterial infection causes mastitis.

63-75. (Cancelled)